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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/788,832

02/28/2004

Kyung-Ju Choi

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7344

27868

7590

06/11/2010

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EXAMINER

MATZEK, MATTHEW D

ART UNIT

PAPER NUMBER

1786

MAIL DATE

DELIVERY MODE

06/11/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<p align="center"><b>Advisory Action</b> <b>Before the Filing of an Appeal Brief</b></p>	<p><b>Application No.</b> 10/788,832</p>	<p><b>Applicant(s)</b> CHOI, KYUNG-JU</p>	
	<p><b>Examiner</b> MATTHEW D. MATZEK</p>	<p><b>Art Unit</b> 1786</p>	

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 24 May 2010 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: \_\_\_\_\_.  
Claim(s) rejected: 22-29 and 33-44.  
Claim(s) withdrawn from consideration: \_\_\_\_\_.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.  
12. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_.  
13. ☐ Other: \_\_\_\_\_.

/Matthew D Matzek/  
Examiner, Art Unit 1786

/Norca L. Torres-Velazquez/  
Primary Examiner, Art Unit 1786

Continuation of 11. does NOT place the application in condition for allowance because: Applicant argues that Shipp fails to teach varying fiber size distribution, "wherein said first gradient density increases in a thickness direction through said first layered mat portion and said second layered mat portion". Applicant asserts that Shipp only describes that each layer has fiber with a varying average diameter. Shipp discloses a depth filter medium which has a gradient of fiber sizes through the depth of the filter medium and that said filter may comprise multiple layers. Therefore, the instantly claimed varying fiber size distribution is provided for in Shipp. Shipp continues on to say that the fiber size gradient through the depth of the filter results in a pore size gradient through the depth of the filter. This pore size gradient yields a varied permeability that increases in the thickness direction through the entire depth of the filter (col. 3, lines 55-68). The claimed density gradient increase results from the fiber and pore size gradient present in the filter of Shipp. Applicant argues that foraminous belt collector of Shipp may not be replaced with the collecting drums of the instant claims. Applicant continues on to state that a single drum collector is used for each layer of the claimed invention and Shipp uses a single belt in forming his filter and as such there is no motivation to modify the single belt process of Shipp with multiple forming drums. Examiner has pointed to the forming drum disclosure in Shipp to point out that it is known in this art to use both belts and drums to form melt blown articles, such as filters. Examiner would also like to point out that Shipp explicitly teaches the formation of a depth filter containing of multiple layers using a forming belt (col. 5, lines 51-68). Therefore, the forming process of Shipp provides for a multiple layer filter with differing fiber sizes, pore sizes, etc. Applicant argues that the applied references fail to teach or suggest varying fiber size distributions to provide varying gradient density and permeability within each of the first and second layered mat portions, but instead teach that the change in gradient density or permeability occurs across the mat, as a whole rather than within each of the mat portions. Shipp discloses the use of a continuous forming belt upon which fibers are laid. The fiber size increases through the depth of the mat formed providing for the claimed fiber size gradients. Since the mat is formed on a continuous belt the delineation between layers is not rigid as would be the case when two preformed articles are laminated together. The current method of mat formation allows for subsequently laid fibers to infiltrate prior layers allowing for some degree of mixing and the product of more than one diehead to constitute a "layer" in the same manner the fibers from multiple dieheads are mixed by Applicant .